

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
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Application Serial Number: 09/554, 531 B
Source: IFW/6
Date Processed by STIC: 10/30/2006

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IFW16

RAW SEQUENCE LISTING

DATE: 10/30/2006

PATENT APPLICATION: US/09/554,531B

TIME: 16:20:00

Input Set : E:\238 087US Amended Seq Listing (25-Oct-06).txt

Output Set: N:\CRF4\10272006\I554531B.raw

3 <110> APPLICANT: BEELEY, NIGEL ROBERT ARNOLD
 4 PRICKETT, KATHRYN S.
 6 <120> TITLE OF INVENTION: NOVEL EXENDIN AGONIST COMPOUNDS
 8 <130> FILE REFERENCE: 238/087 US
 10 <140> CURRENT APPLICATION NUMBER: 09/554,531B
 11 <141> CURRENT FILING DATE: 2000-08-08
 13 <150> PRIOR APPLICATION NUMBER: PCT/US98/24273
 14 <151> PRIOR FILING DATE: 1998-11-13
 16 <150> PRIOR APPLICATION NUMBER: 60/066,029
 17 <151> PRIOR FILING DATE: 1997-11-14
 19 <160> NUMBER OF SEQ ID NOS: 110
 21 <170> SOFTWARE: PatentIn Ver. 2.1
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 39
 25 <212> TYPE: PRT
 26 <213> ORGANISM: Heloderma horridum
 28 <220> FEATURE:
 29 <223> OTHER INFORMATION: c-term amidation
 31 <400> SEQUENCE: 1
 32 His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 33 1 5 10 15
 35 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 36 20 25 30
 38 Ser Gly Ala Pro Pro Pro Ser
 39 35
 42 <210> SEQ ID NO: 2
 43 <211> LENGTH: 39
 44 <212> TYPE: PRT
 45 <213> ORGANISM: Heloderma suspectum
 47 <220> FEATURE:
 48 <223> OTHER INFORMATION: c-term amidation
 50 <400> SEQUENCE: 2
 51 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 52 1 5 10 15
 54 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 55 20 25 30
 57 Ser Gly Ala Pro Pro Pro Ser
 58 35
 61 <210> SEQ ID NO: 3
 62 <211> LENGTH: 30
 63 <212> TYPE: PRT
 64 <213> ORGANISM: Homo sapiens
 66 <220> FEATURE:

CPg-6)

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67 <223> OTHER INFORMATION: c-term amidation
69 <400> SEQUENCE: 3
70 His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
71 1 5 10 15
73 Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
74 20 25 30
77 <210> SEQ ID NO: 4
78 <211> LENGTH: 39
79 <212> TYPE: PRT
80 <213> ORGANISM: Artificial Sequence
82 <220> FEATURE:
83 <223> OTHER INFORMATION: Description of Artificial Sequence: Exendin agonist
84 formula peptide
86 <220> FEATURE:
87 <223> OTHER INFORMATION: c-term may be amidated
89 <220> FEATURE:
90 <221> NAME/KEY: MOD_RES
91 <222> LOCATION: (1)
92 <223> OTHER INFORMATION: His, Arg, Tyr, Ala, Norval, Val or Norleu
94 <220> FEATURE:
95 <221> NAME/KEY: MOD_RES
96 <222> LOCATION: (2)
97 <223> OTHER INFORMATION: Ser, Gly, Ala or Thr
99 <220> FEATURE:
100 <221> NAME/KEY: MOD_RES
101 <222> LOCATION: (3)
102 <223> OTHER INFORMATION: Ala, Asp or Glu
104 <220> FEATURE:
105 <221> NAME/KEY: MOD_RES
106 <222> LOCATION: (4)
107 <223> OTHER INFORMATION: Ala, Norval, Val, Norleu or Gly
109 <220> FEATURE:
110 <221> NAME/KEY: MOD_RES
111 <222> LOCATION: (5)
112 <223> OTHER INFORMATION: Ala or Thr
114 <220> FEATURE:
115 <221> NAME/KEY: MOD_RES
116 <222> LOCATION: (6)
117 <223> OTHER INFORMATION: Ala, Phe, Tyr or naphthylalanine
119 <220> FEATURE:
120 <221> NAME/KEY: MOD_RES
121 <222> LOCATION: (7)
122 <223> OTHER INFORMATION: Thr or Ser
124 <220> FEATURE:
125 <221> NAME/KEY: MOD_RES
126 <222> LOCATION: (8)
127 <223> OTHER INFORMATION: Ala, Ser or Thr
129 <220> FEATURE:
130 <221> NAME/KEY: MOD_RES

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131 <222> LOCATION: (9)
132 <223> OTHER INFORMATION: Ala, Norval, Val, Norleu, Asp or Glu
134 <220> FEATURE:
135 <221> NAME/KEY: MOD_RES
136 <222> LOCATION: (10)
137 <223> OTHER INFORMATION: Ala, Leu, Ile, Val, pentylglycine or Met
139 <220> FEATURE:
140 <221> NAME/KEY: MOD_RES
141 <222> LOCATION: (11)
142 <223> OTHER INFORMATION: Ala or Ser
144 <220> FEATURE:
145 <221> NAME/KEY: MOD_RES
146 <222> LOCATION: (12)
147 <223> OTHER INFORMATION: Ala or Lys
149 <220> FEATURE:
150 <221> NAME/KEY: MOD_RES
151 <222> LOCATION: (13)
152 <223> OTHER INFORMATION: Ala or Gln
154 <220> FEATURE:
155 <221> NAME/KEY: MOD_RES
156 <222> LOCATION: (14)
157 <223> OTHER INFORMATION: Ala, Leu, Ile, pentylglycine, Val or Met
159 <220> FEATURE:
160 <221> NAME/KEY: MOD_RES
161 <222> LOCATION: (15)
162 <223> OTHER INFORMATION: Ala or Glu
164 <220> FEATURE:
165 <221> NAME/KEY: MOD_RES
166 <222> LOCATION: (16)
167 <223> OTHER INFORMATION: Ala or Glu
169 <220> FEATURE:
170 <221> NAME/KEY: MOD_RES
171 <222> LOCATION: (17)
172 <223> OTHER INFORMATION: Ala or Glu
174 <220> FEATURE:
175 <221> NAME/KEY: MOD_RES
176 <222> LOCATION: (19)
177 <223> OTHER INFORMATION: Ala or Val
179 <220> FEATURE:
180 <221> NAME/KEY: MOD_RES
181 <222> LOCATION: (20)
182 <223> OTHER INFORMATION: Ala or Arg
184 <220> FEATURE:
185 <221> NAME/KEY: MOD_RES
186 <222> LOCATION: (21)
187 <223> OTHER INFORMATION: Ala or Leu
189 <220> FEATURE:
190 <221> NAME/KEY: MOD_RES
191 <222> LOCATION: (22)

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192 <223> OTHER INFORMATION: Phe, Tyr or naphthylalanine
194 <220> FEATURE:
195 <221> NAME/KEY: MOD_RES
196 <222> LOCATION: (23)
197 <223> OTHER INFORMATION: Ile, Val, Leu, pentylglycine, tert-butylglycine or Met
199 <220> FEATURE:
200 <221> NAME/KEY: MOD_RES
201 <222> LOCATION: (24)
202 <223> OTHER INFORMATION: Ala, Glu or Asp
204 <220> FEATURE:
205 <221> NAME/KEY: MOD_RES
206 <222> LOCATION: (25)
207 <223> OTHER INFORMATION: Ala, Trp, Phe, Tyr or naphthylalanine
209 <220> FEATURE:
210 <221> NAME/KEY: MOD_RES
211 <222> LOCATION: (26)
212 <223> OTHER INFORMATION: Ala or Leu
214 <220> FEATURE:
215 <221> NAME/KEY: MOD_RES
216 <222> LOCATION: (27)
217 <223> OTHER INFORMATION: Ala or Lys
219 <220> FEATURE:
220 <221> NAME/KEY: MOD_RES
221 <222> LOCATION: (28)
222 <223> OTHER INFORMATION: Ala or Asn
224 <220> FEATURE:
225 <221> NAME/KEY: MOD_RES
226 <222> LOCATION: (31)
227 <223> OTHER INFORMATION: Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine
228 N-alkylpentylglycine or N-alkylalanine
230 <220> FEATURE:
231 <221> NAME/KEY: MOD_RES
232 <222> LOCATION: (36)..(38)
233 <223> OTHER INFORMATION: Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine
234 N-alkylpentylglycine or N-alkylalanine
236 <220> FEATURE:
237 <221> NAME/KEY: MOD_RES
238 <222> LOCATION: (39)
239 <223> OTHER INFORMATION: Ser or Tyr
242 <220> FEATURE:
243 <223> OTHER INFORMATION: provided that no more than three of Xaa3, Xaa4, Xaa5, Xaa6,
244 Xaa8, Xaa9, Xaa10, Xaa11, Xaa12, Xaa13, Xaa14, Xaa15,
245 Xaa16, Xaa17, Xaa19, Xaa20, Xaa21, Xaa24, Xaa25, Xaa26,
246 Xaa27 and Xaa28 are Ala
248 <220> FEATURE:
249 <223> OTHER INFORMATION: provided also that, if Xaa1 is His, Arg or Tyr, then at
250 least one of Xaa3, Xaa4 and Xaa9 is Ala
252 <220> FEATURE:
253 <223> OTHER INFORMATION: this peptide may encompass 28-39 residues, wherein residues

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254 1-28 are constant and residues 29-39 may vary in length
 255 according to the specification as filed; see specification for
 256 detailed description of substitutions and preferred embodiments
 258 <400> SEQUENCE: 4
 W--> 259 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 260 1 5 10 15
 262 Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
 263 20 25 30
 265 Ser Gly Ala Xaa Xaa Xaa
 266 35
 268 <210> SEQ ID NO: 5
 269 <211> LENGTH: 28
 270 <212> TYPE: PRT
 271 <213> ORGANISM: Artificial Sequence
 273 <220> FEATURE:
 274 <223> OTHER INFORMATION: Description of Artificial Sequence: Exendin agonist
 276 <220> FEATURE:
 277 <223> OTHER INFORMATION: c-term amidation
 279 <400> SEQUENCE: 5
 280 Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 281 1 5 10 15
 283 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 284 20 25
 287 <210> SEQ ID NO: 6
 288 <211> LENGTH: 28
 289 <212> TYPE: PRT
 290 <213> ORGANISM: Artificial Sequence
 292 <220> FEATURE:
 293 <223> OTHER INFORMATION: Description of Artificial Sequence: Exendin agonist
 295 <220> FEATURE:
 296 <223> OTHER INFORMATION: c-term amidation
 298 <400> SEQUENCE: 6
 299 His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 300 1 5 10 15
 302 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 303 20 25
 306 <210> SEQ ID NO: 7
 307 <211> LENGTH: 28
 308 <212> TYPE: PRT
 309 <213> ORGANISM: Artificial Sequence
 311 <220> FEATURE:
 312 <223> OTHER INFORMATION: Description of Artificial Sequence: Exendin agonist
 314 <220> FEATURE:
 315 <223> OTHER INFORMATION: c-term amidation
 317 <400> SEQUENCE: 7
 318 His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 319 1 5 10 15
 321 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 322 20 25

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 10/30/2006
PATENT APPLICATION: US/09/554,531B TIME: 16:20:02

Input Set : E:\238_087US Amended Seq Listing (25-Oct-06).txt
Output Set: N:\CRF4\10272006\I554531B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19,20,21,22,23
Seq#:4; Xaa Pos. 24,25,26,27,28,31,36,37,38,39
Seq#:20; Xaa Pos. 6
Seq#:21; Xaa Pos. 6
Seq#:32; Xaa Pos. 10
Seq#:33; Xaa Pos. 10
Seq#:42; Xaa Pos. 14
Seq#:43; Xaa Pos. 14
Seq#:56; Xaa Pos. 22
Seq#:57; Xaa Pos. 22
Seq#:60; Xaa Pos. 23
Seq#:61; Xaa Pos. 23
Seq#:86; Xaa Pos. 31,36,37,38
Seq#:87; Xaa Pos. 36,37,38
Seq#:88; Xaa Pos. 31,36,37
Seq#:89; Xaa Pos. 31,36
Seq#:94; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19,20,21,22,23
Seq#:94; Xaa Pos. 24,25,26,27,28,29,30,33,38,39,40,41
Seq#:95; Xaa Pos. 1,26
Seq#:96; Xaa Pos. 1,26
Seq#:97; Xaa Pos. 1,26
Seq#:98; Xaa Pos. 1,26
Seq#:99; Xaa Pos. 1,27
Seq#:100; Xaa Pos. 1,27
Seq#:101; Xaa Pos. 1,27
Seq#:102; Xaa Pos. 1,27
Seq#:103; Xaa Pos. 27
Seq#:104; Xaa Pos. 27
Seq#:105; Xaa Pos. 27
Seq#:106; Xaa Pos. 27
Seq#:107; Xaa Pos. 28
Seq#:108; Xaa Pos. 28
Seq#:109; Xaa Pos. 28
Seq#:110; Xaa Pos. 28

VERIFICATION SUMMARY

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Input Set : E:\238 087US Amended Seq Listing (25-Oct-06).txt

Output Set: N:\CRF4\10272006\I554531B.raw

L:259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
M:341 Repeated in SeqNo=4
L:570 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:594 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
L:808 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0
L:832 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
L:1008 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0
L:1032 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0
L:1287 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:16
L:1311 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:16
L:1373 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:16
L:1397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:16
L:1908 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:86 after pos.:16
M:341 Repeated in SeqNo=86
L:1938 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:87 after pos.:32
L:1967 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:88 after pos.:16
M:341 Repeated in SeqNo=88
L:1999 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:16
M:341 Repeated in SeqNo=89
L:2279 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:0
M:341 Repeated in SeqNo=94
L:2311 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:0
M:341 Repeated in SeqNo=95
L:2340 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:0
M:341 Repeated in SeqNo=96
L:2369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:97 after pos.:0
M:341 Repeated in SeqNo=97
L:2398 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:98 after pos.:0
M:341 Repeated in SeqNo=98
L:2427 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99 after pos.:0
M:341 Repeated in SeqNo=99
L:2456 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100 after pos.:0
M:341 Repeated in SeqNo=100
L:2485 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:0
M:341 Repeated in SeqNo=101
L:2514 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102 after pos.:0
M:341 Repeated in SeqNo=102
L:2541 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103 after pos.:16
L:2565 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:104 after pos.:16
L:2589 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:105 after pos.:16
L:2613 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:106 after pos.:16
L:2637 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:107 after pos.:16
L:2661 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:108 after pos.:16
L:2685 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:16
L:2709 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:110 after pos.:16